

Atty Dkt. No.: CLON-056US2
USSN: 10/762,588

LISTING OF THE CLAIMS

No amendments to the claims are made in this response. However, for the convenience of the Applicant and the Examiner, a listing of the pending claims in their current form is provided below.

In the Claims:

1-10. (Canceled)

11. (Previously Presented) A kit for purifying a protein, said kit comprising:
a first composition comprising a first metal ion chelate resin comprising a first immobilized metal ion;

a second composition comprising a second metal ion chelate resin comprising a second immobilized metal ion; and

a recombinant vector comprising a nucleotide sequence encoding a metal ion affinity peptide and at least one restriction endonuclease recognition sequence for inserting a heterologous nucleic acid molecule encoding a fusion partner protein for said metal ion affinity peptide.

12. (Original) The kit according to Claim 11, wherein the first metal ion is a hard metal ion, and the second metal ion is an intermediate metal ion.

13. (Original) The kit according to Claim 12, wherein the hard metal ion is chosen from Fe^{3+} , Ca^{2+} and Al^{3+} ; and the intermediate metal ion is chosen from Cu^{2+} , Ni^{2+} , Zn^{2+} and Co^{2+} .

14-15. (Canceled)

16. (Original) The kit according to Claim 11, further comprising:
an extraction buffer;
a wash buffer; and

Atty Dkt. No.: CLON-056US2
USSN: 10/762,588

an elution buffer.

17. (Canceled)

18. (Previously Presented) A kit for purifying a protein, said kit comprising:
a first composition comprising a first metal ion chelate resin comprising a first immobilized Co^{2+} metal ion;
a second composition comprising a second metal ion chelate resin comprising a second immobilized metal ion; and
a recombinant vector comprising a nucleotide sequence encoding a metal ion affinity peptide and at least one restriction endonuclease recognition sequence for inserting a heterologous nucleic acid molecule encoding a fusion partner protein for said metal ion affinity peptide.

19. (Previously Presented) The kit according to Claim 18, wherein the second metal ion is a hard metal ion.

20. (Previously Presented) The kit according to Claim 19, wherein the hard metal ion is chosen from Fe^{3+} , Ca^{2+} and Al^{3+} .

21. (Previously Presented) The kit according to Claim 18, further comprising:
an extraction buffer;
a wash buffer; and
an elution buffer.

22. (Canceled)

23. (Previously Presented) The kit according to Claim 11, wherein said metal ion affinity peptide comprises SEQ ID NO:1.

Atty Dkt. No.: CLON-056US2
USSN: 10/762,588

24. (Previously Presented) The kit according to Claim 18, wherein said metal ion affinity peptide comprises SEQ ID NO:1.